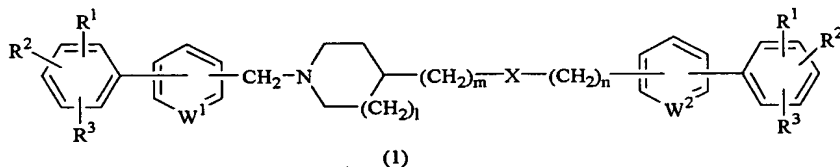


CLAIMS

1. An angiogenesis inhibitor comprising, as an active ingredient, a cyclic amine compound represented by the general formula (1):

[Formula 1]



wherein R^1 , R^2 , and R^3 each independently represent a hydrogen atom, a halogen atom, a hydroxy group, an alkyl group, a halogen-substituted alkyl group, an alkoxy group, an alkylthio group, a carboxyl group, an alkoxycarbonyl group, or an alkanoyl group; W^1 and W^2 each independently represent N or CH; X represents O, NR^4 , $CONR^4$, or NR^4CO ; R^4 represents a hydrogen atom, an alkyl group, an alkenyl group, an alkynyl group, a substituted or unsubstituted aryl group, a substituted or unsubstituted heteroaryl group, a substituted or unsubstituted aralkyl group, or a substituted or unsubstituted heteroaralkyl group; and l, m, and n each represent a number of 0 or 1, or a salt thereof, or a solvate thereof.

2. The angiogenesis inhibitor according to claim 1, wherein R^1 , R^2 , and R^3 are each a hydrogen atom, a halogen atom, a hydroxy group, a C_1 - C_8 alkyl group, a halogen-substituted C_1 - C_8 alkyl group, an alkoxy group having a C_1 - C_8 alkyl group, an alkylthio group having a C_1 - C_8 alkyl group, a carboxyl group,

an alkoxy carbonyl group having a C₁-C₆ alkyl group, or an alkanoyl group having a C₁-C₆ alkyl group.

3. The angiogenesis inhibitor according to claim 1, wherein R⁴ is a hydrogen atom, a C₁-C₈ alkyl group, a C₃-C₈ alkenyl group, a C₃-C₈ alkynyl group, a substituted or unsubstituted C₆-C₁₄ aryl group, a substituted or unsubstituted 5- or 6-membered heteroaryl group containing 1 to 4 nitrogen atoms, a substituted or unsubstituted C₆-C₁₄ aryl-C₁-C₆ alkyl group, or a C₁-C₆ alkyl group having a substituted or unsubstituted 5- or 6-membered heteroaryl group containing 1 to 4 nitrogen atoms.

4. The angiogenesis inhibitor according to claim 3, wherein the aryl group, the aryl group of the aralkyl group, the heteroaryl group, or the heteroaryl group of the heteroaralkyl group in R⁴ is substituted with 1 to 3 substituents selected from an alkyl group, an alkoxy group, an alkylthio group, a halogen atom, a nitro group, an amino group, an acetylamino group, a trifluoromethyl group, and an alkylendioxy group.

5. The angiogenesis inhibitor according to claim 1, wherein the active ingredient is

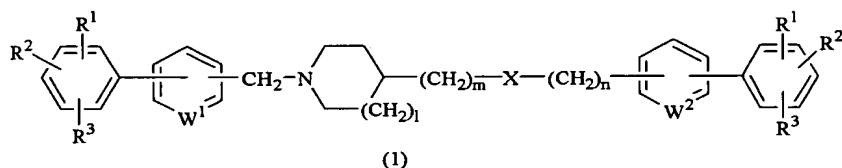
4-[N-(4-methoxyphenyl)-N-[[5-(3,4,5-trimethoxyphenyl)pyridin-3-yl]methyl]amino]-1-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]piperidine,

4-[N-(4-methoxyphenyl)-N-[[2-(3,4,5-trimethoxyphenyl)pyr

idin-4-yl)methyl]amino]-1-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl)methyl]piperidine, or a salt thereof.

6. A prophylactic or therapeutic agent against a disease or condition caused by angiogenesis, comprising, as an active ingredient, a cyclic amine compound represented by the general formula (1):

[Formula 2]



wherein R^1 , R^2 , and R^3 each independently represent a hydrogen atom, a halogen atom, a hydroxy group, an alkyl group, a halogen-substituted alkyl group, an alkoxy group, an alkylthio group, a carboxyl group, an alkoxy carbonyl group, or an alkanoyl group; W^1 and W^2 each independently represent N or CH; X represents O, NR^4 , $CONR^4$, or NR^4CO ; R^4 represents a hydrogen atom, an alkyl group, an alkenyl group, an alkynyl group, a substituted or unsubstituted aryl group, a substituted or unsubstituted heteroaryl group, a substituted or unsubstituted aralkyl group, or a substituted or unsubstituted heteroaralkyl group; and l, m, and n each represent a number of 0 or 1, or a salt thereof, or a solvate thereof.

7. The prophylactic or therapeutic agent according to claim 6, wherein R^1 , R^2 , and R^3 are each a hydrogen atom, a halogen atom, a hydroxy group, a C_1 - C_8 alkyl group, a

halogen-substituted C₁-C₈ alkyl group, an alkoxy group having a C₁-C₈ alkyl group, an alkylthio group having a C₁-C₈ alkyl group, a carboxyl group, an alkoxycarbonyl group having a C₁-C₆ alkyl group, or an alkanoyl group having a C₁-C₆ alkyl group.

8. The prophylactic or therapeutic agent according to claim 6, wherein R⁴ is a hydrogen atom, a C₁-C₈ alkyl group, a C₃-C₈ alkenyl group, a C₃-C₈ alkynyl group, a substituted or unsubstituted C₆-C₁₄ aryl group, a substituted or unsubstituted 5- or 6-membered heteroaryl group containing 1 to 4 nitrogen atoms, a substituted or unsubstituted C₆-C₁₄ aryl-C₁-C₆ alkyl group, or a C₁-C₆ alkyl group having a substituted or unsubstituted 5- or 6-membered heteroaryl group containing 1 to 4 nitrogen atoms.

9. The prophylactic or therapeutic agent according to claim 8, wherein the aryl group, the aryl group of the aralkyl group, the heteroaryl group, or the heteroaryl group of the heteroaralkyl group in R⁴ is substituted with 1 to 3 substituents selected from an alkyl group, an alkoxy group, an alkylthio group, a halogen atom, a nitro group, an amino group, an acetyl amino group, a trifluoromethyl group, and an alkylendioxy group.

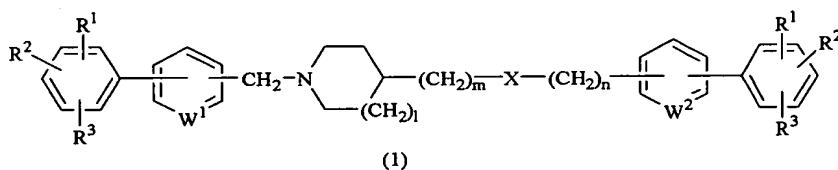
10. The prophylactic or therapeutic agent according to claim 6, wherein the active ingredient is
4-[N-(4-methoxyphenyl)-N-[[5-(3,4,5-trimethoxyphenyl)pyr

idin-3-yl)methyl]amino]-1-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl)methyl]piperidine,
4-[N-(4-methoxyphenyl)-N-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl)methyl]amino]-1-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl)methyl]piperidine, or a salt thereof.

11. The prophylactic or therapeutic agent according to claim 6, wherein the disease or pathological condition is proliferation, recurrence, or metastasis of malignant solid tumor, corneal angiogenesis, pterygium, conjunctivitis, rubeosis iridis, neovascular glaucoma, proliferative retinopathy, central retinal vein occlusion, diabetic retinopathy, retinal angiogenesis, or age-related macular degeneration.

12. Use, for producing an angiogenesis inhibitor, of a cyclic amine compound represented by the general formula (1):

[Formula 3]



wherein R^1 , R^2 , and R^3 each independently represent a hydrogen atom, a halogen atom, a hydroxy group, an alkyl group, a halogen-substituted alkyl group, an alkoxy group, an alkylthio group, a carboxyl group, an alkoxycarbonyl group, or an alkanoyl group; W^1 and W^2 each independently represent N or CH; X represents O, NR^4 , $CONR^4$, or NR^4CO ; R^4 represents a hydrogen atom, an alkyl group, an alkenyl group, an alkynyl

group, a substituted or unsubstituted aryl group, a substituted or unsubstituted heteroaryl group, a substituted or unsubstituted aralkyl group, or a substituted or unsubstituted heteroaralkyl group; and l, m, and n each represent a number of 0 or 1, or a salt thereof, or a solvate thereof.

13. The use according to claim 12, wherein R^1 , R^2 , and R^3 are each a hydrogen atom, a halogen atom, a hydroxy group, a C_1 - C_8 alkyl group, a halogen-substituted C_1 - C_8 alkyl group, an alkoxy group having a C_1 - C_8 alkyl group, an alkylthio group having a C_1 - C_8 alkyl group, a carboxyl group, an alkoxycarbonyl group having a C_1 - C_6 alkyl group, or an alkanoyl group having a C_1 - C_6 alkyl group.

14. The use according to claim 12, wherein R^4 is a hydrogen atom, a C_1 - C_8 alkyl group, a C_3 - C_8 alkenyl group, a C_3 - C_8 alkynyl group, a substituted or unsubstituted C_6 - C_{14} aryl group, a substituted or unsubstituted 5- or 6-membered heteroaryl group containing 1 to 4 nitrogen atoms, a substituted or unsubstituted C_6 - C_{14} aryl- C_1 - C_6 alkyl group, or a C_1 - C_6 alkyl group having a substituted or unsubstituted 5- or 6-membered heteroaryl group containing 1 to 4 nitrogen atoms.

15. The use according to claim 14, wherein the aryl group, the aryl group of the aralkyl group, the heteroaryl group, or the heteroaryl group of the heteroaralkyl group in R^4 is substituted with 1 to 3 substituents selected from an alkyl

group, an alkoxy group, an alkylthio group, a halogen atom, a nitro group, an amino group, an acetylamino group, a trifluoromethyl group, and an alkylenedioxy group.

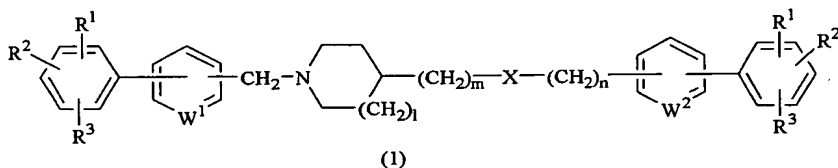
16. The use according to claim 12, wherein the active ingredient is

4-[N-(4-methoxyphenyl)-N-[[5-(3,4,5-trimethoxyphenyl)pyridin-3-yl]methyl]amino]-1-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]piperidine,

4-[N-(4-methoxyphenyl)-N-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]amino]-1-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]piperidine, or a salt thereof.

17. Use, for producing a prophylactic or therapeutic agent against a disease or pathological condition caused by angiogenesis, of a cyclic amine compound represented by the general formula (1):

[Formula 4]



wherein R^1 , R^2 , and R^3 each independently represent a hydrogen atom, a halogen atom, a hydroxy group, an alkyl group, a halogen-substituted alkyl group, an alkoxy group, an alkylthio group, a carboxyl group, an alkoxycarbonyl group, or an alkanoyl group; W^1 and W^2 each independently represent N or CH; X represents O, NR^4 , $CONR^4$, or NR^4CO ; R^4 represents a hydrogen atom, an alkyl group, an alkenyl group, an alkynyl

group, a substituted or unsubstituted aryl group, a substituted or unsubstituted heteroaryl group, a substituted or unsubstituted aralkyl group, or a substituted or unsubstituted heteroaralkyl group; and l, m, and n each represent a number of 0 or 1, or a salt thereof, or a solvate thereof.

18. The use according to claim 17, wherein R^1 , R^2 , and R^3 are each a hydrogen atom, a halogen atom, a hydroxy group, a C_1 - C_8 alkyl group, a halogen-substituted C_1 - C_8 alkyl group, an alkoxy group having a C_1 - C_8 alkyl group, an alkylthio group having a C_1 - C_8 alkyl group, a carboxyl group, an alkoxycarbonyl group having a C_1 - C_6 alkyl group, or an alkanoyl group having a C_1 - C_6 alkyl group.

19. The use according to claim 17, wherein R^4 is a hydrogen atom, a C_1 - C_8 alkyl group, a C_3 - C_8 alkenyl group, a C_3 - C_8 alkynyl group, a substituted or unsubstituted C_6 - C_{14} aryl group, a substituted or unsubstituted 5- or 6-membered heteroaryl group containing 1 to 4 nitrogen atoms, a substituted or unsubstituted C_6 - C_{14} aryl- C_1 - C_6 alkyl group, or a C_1 - C_6 alkyl group having a substituted or unsubstituted 5- or 6-membered heteroaryl group containing 1 to 4 nitrogen atoms.

20. The use according to claim 19, wherein, the aryl group, the aryl group of the aralkyl group, the heteroaryl group, or the heteroaryl group of the heteroaralkyl group in R^4 is substituted with 1 to 3 substituents selected from an alkyl

group, an alkoxy group, an alkylthio group, a halogen atom, a nitro group, an amino group, an acetylamino group, a trifluoromethyl group, and an alkylenedioxy group.

21. The use according to claim 17, wherein the active ingredient is

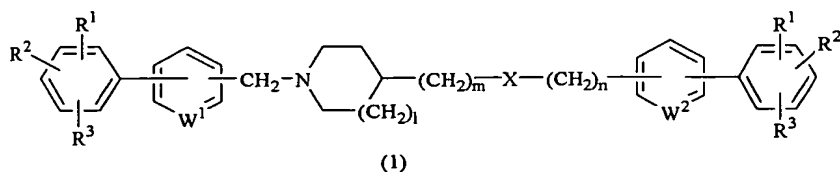
4-[N-(4-methoxyphenyl)-N-[[5-(3,4,5-trimethoxyphenyl)pyridin-3-yl]methyl]amino]-1-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]piperidine,

4-[N-(4-methoxyphenyl)-N-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]amino]-1-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]piperidine, or a salt thereof.

22. The use according to claim 17, wherein the disease or pathological condition is proliferation, recurrence, or metastasis of malignant solid tumor, corneal angiogenesis, pterygium, conjunctivitis, rubeosis iridis, neovascular glaucoma, proliferative retinopathy, central retinal vein occlusion, diabetic retinopathy, retinal angiogenesis, or age-related macular degeneration.

23. A method for inhibiting angiogenesis, comprising administering an effective amount of a cyclic amine compound represented by the general formula (1):

[Formula 5]



wherein R^1 , R^2 , and R^3 each independently represent a hydrogen atom, a halogen atom, a hydroxy group, an alkyl group, a halogen-substituted alkyl group, an alkoxy group, an alkylthio group, a carboxyl group, an alkoxycarbonyl group, or an alkanoyl group; W^1 and W^2 each independently represent N or CH; X represents O, NR^4 , $CONR^4$, or NR^4CO ; R^4 represents a hydrogen atom, an alkyl group, an alkenyl group, an alkynyl group, a substituted or unsubstituted aryl group, a substituted or unsubstituted heteroaryl group, a substituted or unsubstituted aralkyl group, or a substituted or unsubstituted heteroaralkyl group; and l, m, and n each represent a number of 0 or 1, or a salt thereof, or a solvate thereof to patients in need thereof.

24. The method according to claim 23, wherein R^1 , R^2 , and R^3 are each a hydrogen atom, a halogen atom, a hydroxy group, a C_1 - C_8 alkyl group, a halogen-substituted C_1 - C_8 alkyl group, an alkoxy group having a C_1 - C_8 alkyl group, an alkylthio group having a C_1 - C_8 alkyl group, a carboxyl group, an alkoxycarbonyl group having a C_1 - C_6 alkyl group, or an alkanoyl group having a C_1 - C_6 alkyl group.

25. The method according to claim 23, wherein R^4 is a hydrogen atom, a C_1 - C_8 alkyl group, a C_3 - C_8 alkenyl group, a C_3 - C_8 alkynyl group, a substituted or unsubstituted C_6 - C_{14} aryl group, a substituted or unsubstituted 5- or 6-membered heteroaryl group containing 1 to 4 nitrogen atoms, a substituted or unsubstituted C_6 - C_{14} aryl- C_1 - C_6 alkyl group, or a C_1 - C_6 alkyl

group having a substituted or unsubstituted 5- or 6-membered heteroaryl group containing 1 to 4 nitrogen atoms.

26. The method according to claim 25, wherein the aryl group, the aryl group of the aralkyl group, the heteroaryl group or the heteroaryl group of the heteroaralkyl group in R⁴ is substituted with 1 to 3 substituents selected from an alkyl group, an alkoxy group, an alkylthio group, a halogen atom, a nitro group, an amino group, an acetylamino group, a trifluoromethyl group, and an alkylenedioxy group.

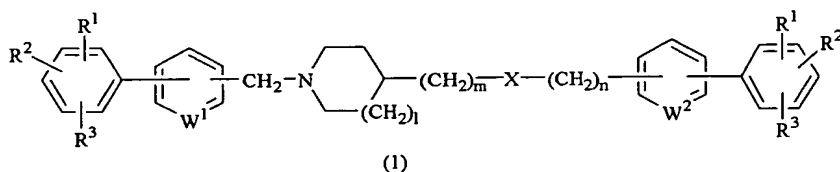
27. The method according to claim 23, wherein the active ingredient is

4-[N-(4-methoxyphenyl)-N-[[5-(3,4,5-trimethoxyphenyl)pyridin-3-yl]methyl]amino]-1-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]piperidine,

4-[N-(4-methoxyphenyl)-N-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]amino]-1-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]piperidine, or a salt thereof.

28. A method for treating a disease or pathological condition caused by angiogenesis, comprising administering an effective amount of a cyclic amine compound represented by the general formula (1):

[Formula 6]



wherein R^1 , R^2 , and R^3 each independently represent a hydrogen atom, a halogen atom, a hydroxy group, an alkyl group, a halogen-substituted alkyl group, an alkoxy group, an alkylthio group, a carboxyl group, an alkoxycarbonyl group, or an alkanoyl group; W^1 and W^2 each independently represent N or CH; X represents O, NR^4 , $CONR^4$, or NR^4CO ; R^4 represents a hydrogen atom, an alkyl group, an alkenyl group, an alkynyl group, a substituted or unsubstituted aryl group, a substituted or unsubstituted heteroaryl group, a substituted or unsubstituted aralkyl group, or a substituted or unsubstituted heteroaralkyl group; and l, m, and n each represent a number of 0 or 1, a salt thereof, or a solvate thereof.

29. The method according to claim 28, wherein R^1 , R^2 , and R^3 are each a hydrogen atom, a halogen atom, a hydroxy group, a C_1 - C_8 alkyl group, a halogen-substituted C_1 - C_8 alkyl group, an alkoxy group having a C_1 - C_8 alkyl group, an alkylthio group having a C_1 - C_8 alkyl group, a carboxyl group, an alkoxycarbonyl group having a C_1 - C_6 alkyl group, or an alkanoyl group having a C_1 - C_6 alkyl group.

30. The method according to claim 28, wherein R^4 is a hydrogen atom, a C_1 - C_8 alkyl group, a C_3 - C_8 alkenyl group, a C_3 - C_8 alkynyl group, a substituted or unsubstituted C_6 - C_{14} aryl group, a substituted or unsubstituted 5- or 6-membered heteroaryl group containing 1 to 4 nitrogen atoms, a substituted or unsubstituted C_6 - C_{14} aryl- C_1 - C_6 alkyl group, or a C_1 - C_6 alkyl

group having a substituted or unsubstituted 5- or 6-membered heteroaryl group containing 1 to 4 nitrogen atoms.

31. The method according to claim 30, wherein the aryl group, the aryl group of the aralkyl group, the heteroaryl group or the heteroaryl group of the heteroaralkyl group in R⁴ is substituted with 1 to 3 substituents selected from an alkyl group, an alkoxy group, an alkylthio group, a halogen atom, a nitro group, an amino group, an acetylamino group, a trifluoromethyl group, and an alkylenedioxy group.

32. The method according to claim 28, wherein the active ingredient is

4-[N-(4-methoxyphenyl)-N-[[5-(3,4,5-trimethoxyphenyl)pyridin-3-yl]methyl]amino]-1-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]piperidine,

4-[N-(4-methoxyphenyl)-N-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]amino]-1-[[2-(3,4,5-trimethoxyphenyl)pyridin-4-yl]methyl]piperidine, or a salt thereof.

33. The method according to claim 28, wherein the disease or pathological condition is proliferation, recurrence, or metastasis of malignant solid tumor, corneal angiogenesis, pterygium, conjunctivitis, rubeosis iridis, neovascular glaucoma, proliferative retinopathy, central retinal vein occlusion, diabetic retinopathy, retinal angiogenesis, or age-related macular degeneration.